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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,251	01/11/2002	C. Richard Panico	99148.165	2287
23483	7590	06/28/2005	EXAMINER	
WILMER CUTLER PICKERING HALE AND DORR LLP 60 STATE STREET BOSTON, MA 02109			HARAN, JOHN T	
			ART UNIT	PAPER NUMBER
			1733	

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/055,251

Applicant(s)

PANICO ET AL.

Examiner

John T. Haran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,5,8,12,13,15,17,21,26,27,31 and 32 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 12,15,17,26 and 32 is/are allowed.  
6) ☒ Claim(s) 1,2,5,8,13,21,27,31 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. This action is in response to the amendments and remarks filed on 6/6/05.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 is indefinite because it requires one of the rings to be closer to the DVD than the other and it appears this would only be possible if the rings are in different planes, however claim 15 states the rings are concentric and that the lamp is in a single plane. Concentric rings have the same center and are in the same plane so it is unclear how the rings can be both concentric and in different planes so that one ring is closer to the DVD than the other. Also it is unclear how the second ring can be positioned closer to the DVD than the second ring when the lamp is in a single plane because if the lamp has two separated rings that are different distances from the DVD then they are in different planes.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 5, 8 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al (U.S. Patent 5,684,778) in view of Panico (U.S. Patent 4,495,040).

Yamada discloses a system comprising an optical disk (DVD) lying in a first plane and a pulsed lamp for directing pulsed light to the optical disk for processing the optical disk during manufacture wherein the lamp having a plurality of straight lamps or a lamp having a spiral shape (Column 17, lines 55-65).

Yamada is silent towards whether or not the spiral lamp is a flat spiral lamp and lies in a second plane parallel to the first plane, however such it is well known and conventional for spiral lamps to be flat and be in a plane parallel to the plane of a workpiece, as shown for example in Panico (See Figure 3). One skilled in the art would have readily appreciated using a flat spiral lamp as is conventional as suggested in Panico. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a flat spiral lamp that lies in a second plane parallel to the first plane in the system of Yamada, as suggested in Panico.

Yamada teaches that the optical disk (DVD) has a central hole but is silent towards whether or not the reflector is contoured to provide less light to the center of the DVD where the hole is located and more light to the periphery of the DVD. One skilled in the art would have readily appreciated that the reflector reflects the uv light from the lamp to the DVD to cure the adhesive to bond the two optical substrates together to form the DVD. One skilled in the art would have readily recognized that there is no

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adhesive to cure at the center of the DVD as it has a hole there and that there is no need to waste excess energy applying pulsed light to that area. It would have been within the ordinary skill of the skilled artisan to contour the reflector to provide more light to the periphery of the DVD than the center of the DVD in order to more efficiently utilize the energy. It would have been obvious to one of ordinary skill in the art at the time the invention was made for the reflector to be contoured to provide more light to the periphery of the DVD than to the center of the DVD in the system of Yamada.

Regarding claim 2, spiral lamps generally have at least two turns as shown for example in Panico (See Figure 3) and it would have been obvious to use such in the system of Yamada, as modified above.

Regarding claims 5 and 8, one skilled in the art would have readily appreciated having the lamp being smaller or larger than the DVD and having the reflector appropriately contoured to ensure uniform surface exposure to the pulsed light. It would have been obvious for the lamp to have a larger or smaller diameter than the DVD in the system of Yamada, as modified above.

Regarding claim 31, the uv curing lamp would be capable of curing an ultraviolet adhesive in the DVD.

6. Claims 13 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al (U.S. Patent 5,684,778) in view of Panico (U.S. Patent 4,495,040) as applied to claims 1, 2, 5 and 8 above, and further in view of Buazza (U.S. Patent 5,928,575).

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Yamada is silent towards there being first and second rings in different planes that are parallel. Buazza teaches that flash lamps can be arranged in a plurality of shapes, including ring, helix, U, and linear and that the shapes are interchangeable (Column 44, lines 14-15). One skilled in the art would have readily appreciated using any of the known shapes for a flash lamp including a helix, which has a plurality of rings in different planes that are parallel in the lamp of Yamada. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the lamp with a helix shape that has first and second rings in different planes that are parallel in the lamp on Yamada as is known in the art as suggested in Buazza.

Regarding claim 27, one skilled in the art would have readily appreciated that a helix lamp is an extended flat spiral lamp and that the rings would have different radii.

7. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al (U.S. Patent 5,684,778) in view of Panico (U.S. Patent 4,495,040) as applied to claims 1, 2, 5 and 8 above, and further in view of Rosenthal (U.S. Patent 6,030,653).

The above cited art is silent towards the lamp having a spiral configuration about a central axis and extending from an inner radius spaced from the central axis to an outer axis and having at least one turn in a first plane perpendicular to the central axis wherein the inner radius and outer radius are spaced from the central axis so relatively less energy is provided to the workpiece along the central axis and relatively more energy is provide to portions of the workpiece between the inner and outer radius. Such is known as shown for example in Rosenthal (See Figure 1 and Column 6, lines 4-17).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a spiral lamp that has the inner radius spaced from the central axis in the apparatus of Yamada et al, as modified above, as there is no need to direct light to the central axis because that is where the central hole of the DVD is placed and there is no adhesive to cure there.

It is noted that Panico teaches an anode and cathode connection extending from the lamp to a power supply, one from the inner radius and the other from the outer radius wherein the connections extend in a direction perpendicular to the first plane through openings in a reflector (See Figures 2 and 11; Column 3, lines 8-22).

### ***Response to Arguments***

8. Applicant's arguments filed on 2/6/05 with regards to claims 1 and 21 have been fully considered but they are not persuasive.

Regarding claim 1, no hindsight is involved. One skilled in the art would have readily appreciated that the reflector reflects the uv light from the lamp to the DVD to cure the adhesive to bond the two optical substrates together to form the DVD. One skilled in the art would have readily recognized that there is no adhesive to cure at the center of the DVD as it has a hole there and that there is no need to waste excess energy applying pulsed light to that area. It would have been within the ordinary skill of the skilled artisan to contour the reflector to provide more light to the periphery of the DVD than the center of the DVD in order to more efficiently utilize the energy. There is ample motivation and expectation of success to have such a contoured reflector.

***Allowable Subject Matter***

9. Claims 12, 15, 26 and 32 are allowed.
10. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 12, the prior art of record fails to suggest the claimed system for processing a DVD, particularly having a lamp with first and second rings that are separately energized and are in different planes with each plane being parallel to that of the DVD.

Regarding claim 15, the prior art of record fails to suggest the claimed system, particularly having a pulsed lamp including a first ring and a second ring, wherein the first and second rings are concentric, having different radius and a separated from one another.

***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the



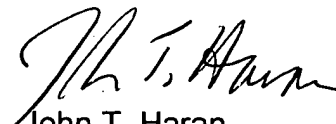
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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John T. Haran whose telephone number is (571) 272-1217. The examiner can normally be reached on M-Th (8 - 5) and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
John T. Haran  
Primary Examiner  
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